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David A Mims Jr
Intellectual Property Law Dept
IBM Corporation
11400 Burnet Road Zip 4054
Austin, TX 78758

EXAMINER	
TRUONG, LECHI	

ART UNIT	PAPER NUMBER
2126	6

DATE MAILED: 03/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/620,354	Applicant(s) CHAN ET AL.	
	Examiner LeChi Truong	Art Unit 2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2003*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-39* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-39* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-39 are presented for examination. This action is in response for the amendment filed 12/11/2003. Applicant amended claims 1, 10, 11, 14, 19, 20, 26.

2. Claims 29-30 , 38 and 39, are objected to for being. It is unclear whether they're independent or dependent claims. Claims 1 & 10 are method claims and claims 29 –30 , 38-39 are program of instruction executable by machine. Corrections are required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims **1, 4, 5, 8, 9, 10, 19, 26, 29, 32, 38** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans).

4. Ismael was cited in the last office action.

5. As to claim 1, Ismael teaches the invention substantially as claimed including: a software component (target object, left con 27, ln 10-58/right col 2, ln 44-50/ m-bean, left col 13, ln 1-50/ an agent, right col 14, ln 9-58), first server (a remote station, right col 28, ln 5-45/ manager object server, Fib 3), computer network (computer workstation, col 5, ln 10-43), a wrapper (a

client object forming a representation of the target object, col 2, ln 5-49/ right col 27, ln 15-55/ a managed object adaptor client, col 14,ln 35-44), a remote interface method(methods of remote m-beans, right col 12, ln 30-58), a software component remote interface(remote serve station, col 10, ln 35-50), a constructor(a default name to the m-bean, col 20,ln 25-45/ public Property Type get Property Name(), col 15, ln 20-35).

6. Ismael does not teach user based upon single or multiple usage of said software component, home interface and remote interface of software component are hidden from a client program. However, MC teaches user based upon single or multiple usage of said software component (user at workstation, page 2, ln 14-17, a factory wrapper object ... which in turn passes on the call to the real class factory, context wrapper object for MST object of MST component, page 3, ln 1- 13/ Fig. 1/ EJB home object wraps the bean's Home interface, while an EJB object wraps the bean's business methods, context object on Enterprise bean works for session context and entity context, page 3, ln 13- 32/ Fig. 2) since the Enterprise bean interfaces were wrapped, the interfaces must be hidden from the a client .

7. It would have been obvious one of the ordinary skill in the art at time the invention was made to combine the teaching Ismael and MC because MC's based upon single or multiple usage of said software component, home interface of software component are hidden from a client program would handle hundreds or thousands of clients, services that make it easier to build scalable applications are commonly built into products that support transaction.

8. **As to claim 4,** Ismael teaches an enterprise bean (bean, col 7,l n 35-58).

9. **As to claim 5**, Ismael teaches a null constructor (a default design pattern... Public PropertyType get PropertyName ().

10. **As to claim 8, 9,** Ismael teaches a typel access bean, type 2-type 3-access bean (the object name contain key properties/ a list of object name/ a list of C-bean, col 24,l n 10-45).

11. **As to claim 10**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reasons as claim 1 above. In additional , Ismael teaches a client program (client, Fig. 8), an Access bean (a client object forming a representation of the target object, col 2, ln 5-49/ right col 27, ln 15-55/ a managed object adaptor client, col 14,ln 35-44), enterprise bean (target object, left con 27, ln 10-58/right col 2, ln 44-50/ m-bean, left col 13, ln 1-50/ an agent, right col 14, ln 9-58), a plurality of constructors, a plurality of methods, subsequent methods (a set of properties, a set of methods, col 28, ln 30-50/ a default name to the m-bean, col 20,ln 25-45/ public Property Type get PropertyName(), col 15, ln 20-35), methods of said enterprise bean(the properties of the corresponding m-bean, col 23,l n 1-5).

12. **As to a computer readable medium of claim 19** see the rejection of claim 10. Further, MC teaches MC teaches home interface and remote interface (Myhome interface, Myinterface, Fig. 3).

13. **As to claim 26**, Ismael teaches an enterprise bean (bean, col 7,l n 35-58/ target object, left con 27, ln 10-58/right col 2, ln 44-50/ m-bean, left col 13, ln 1-50/ an agent, right col 14, ln 9-58), a client program (Managed Object Adaptor Client, Fig. 8), access bean (a client object forming a representation of the target object, col 2, ln 5-49/ right col 27, ln 15-55/ a managed object adaptor client, col 14,ln 35-44), a java bean (c-bean, col 13, ln 1-50/ Fig. 8).

14. **As to claims 29, 32, 38,** they are apparatus claims of claims 1, 6, 10; therefore, they are rejected for the same reasons as claims 1, 6, 10 above.

15. Claims **6, 7, 11- 14, 20 , 33, 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans) and further in view of Admitted Prior Art (APA).

16. **As to claim 6**, Ismael and MC do not teach a second server connected to say first server. However, APA teaches a second server connected to say first server (server reside on another server, page 1, ln 10-18).

17. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching of APA to Ismael, MC and APA because APA's "a second server connected to say first server" would make the provide the application software, the logic, and evens the databases for a number of other servers and clients.

18. **As to claim 7**, APA teaches Internet (Internet, page 1, ln 20-30).

19. **As to claim 11** refer to the rejection of claim 1. Further, Ismael teaches an Access bean (a client object forming a representation of the target object, col 2, ln 5-49/ right col 27, ln 15-55/ a managed object adaptor client, col 14,ln 35-44), Ismael does not teach a server has a client program communicating to a server, a database. However, APA teaches teach a server has a client program communicating to a server, a database (Java application can be written on one server and then transferred over the servers, page 1, ln 20- 30/ a database 100, page 4, ln 1-11).

20. **As to claim 12**, APA teaches first server is the first server teaches server resides on another server (page 1, ln 10-16). Therefore, the computer bus must be an internal bus.

21. **As to claim 13**, Ismael teaches different server on the computer nerwork (client and remote stations, col 2, ln 20-25).

22. **As to claim 14**, Ismael teaches a software component (target object, left con 27, ln 10-58/right col 2, ln 44-50/ m-bean, left col 13, ln 1-50/ an agent, right col 14, ln 9-58, name server (manager object server, col 9, ln 38-56, col 10/ ln 5-50/ Fib 3), computer network (computer workstation, col 5, ln 10-43), a wrapper (a client object forming a representation of the target object, col 2, ln 5-49/ right col 27, ln 15-55/ a managed object adaptor client, col 14,ln 35-44), a remote interface method(methods of remote m-beans, right col 12, ln 30-58), a software component remote interface(remote serve station, col 10, ln 35-50), a null constructor(a default name to the m-bean, col 20,ln 25-45/ public Property Type get PropertyName(), col 15, ln 20-35.

23. Ismael and MC do not teach a home interface. However, APA teaches the home interface 138 (home interface, page 4, ln 1-23).

24. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching of Ismael, MC and APA because APA's "a second server connected to say first server" would create or find an instance of the enterprise bean on the Enterprise JavaBeans.

25. **As to claim 20**, it is an apparatus claim of claim 10; therefore, it is rejected for the same reasons as claims 10 above.

26. **As to claim 33, 34,** are apparatus claims of claims 7, 8; therefore, they are rejected for the same reasons as claims 7, 8 above.

27. Claims **2, 3, 15, 16, 18, 21, 22, 23, 30, 31** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans) in view of Admitted Prior Art (APA) and further in view of Knutson (US. Patent 6,557,100 B1)

28. **As to claim 2,** Ismael, MC and APA do not teach cache the attribute. However, Knutson teaches cache the attribute (an EBJ is cached ,col 2, ln 30-50).

29. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching Ismael, MC, APA and Knutson because Knutson's "caches the attribute" would reduce the redeployment time spent in distributed data processing systems.

30. **As to claim 3,** Ismael teaches a string conventional (its associated c-bean 54, col 13, ln 1-35), one chosen attribute (attribute of an m-bean, col 13, ln 1-50/ event of an m-bean, col 15, ln 150-59).

31. **As to claim 15, 16, 18, 31** they are apparatus claims of claim 2-4; therefore, they are rejected for the same reasons as claims 2-4 above.

32. **As to claim 21,** it is apparatus claim of claim 15; therefore, it is rejected for the same reasons as claim 15.

33. **As to claim 22** refer to the rejection of claim 8. Further, Ismael teaches setter and getter method (the setter, the getter, col 15,l n 25-35), get/ set method (get PropertyName, set Property name, col 15, ln 25-35).

34. **As to claim 23**, it is an apparatus claim of claim 3; therefore, it is rejected for the same reasons as claim 3 above.

35. **As to claim 30**, it is an apparatus claim of claims 26; therefore, it is rejected as the same reason as claim 26 above.

36. Claims **17, 24, 35, 36** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans) in view of Admitted Prior Art (APA) in view of Knutson (US. Patent 6,557,100 B1) further in view of Gruber et al (US. Patent 6,115,793).

37. **As to claim 17**, Ismael, MC, APA and Knutson do not teach indexing said local cache. However, Gruber teaches indexing said local cache (the cache location index, col 4, ln 29-60).

38. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching Ismael, MC, APA, Knutson and Gruber beacuase Gruber 's " indexing said local caches would minimize the complexity and maximize the performance of the cache and to improve performance requires successive doubling of the size, and cost of cache memory.

39. **As to claims 24, 35,** they are apparatus claims of claims 17, 4; therefore, they are rejected for the same reasons as claims 17, 4 above.

40. **As to claim 36,** it is an apparatus claim of claim 17; therefore, it is rejected for the same reasons as claim 17 above.

41. Claims **27, 28, 39 are** rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans) in view of Admitted Prior Art (APA) in view of Knutson (US. Patent 6,557,100 B1) and further in view of Housel (US. Patent 6,061,714).

42. **As to claim 27,** it is an apparatus claim of claim 15; it is rejected for the same reasons as claim 15 above.

43. **As to claim 28,** Ismael, MC, APA and Knutson do not teach the table entry. However, Housel teaches the table entry (index translation table 370, col 5, ln 41-65/ col 4, ln 30-49).

44. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching Ismael, MC, APA, Knutson and Housel because Housel's "index translation table" would associate each logical index with a physical index.

45. **As to claim 39,** it is an apparatus claim of claim 28; therefore, it is rejected for the same reasons as claim 28 above.

46. Claims **25, 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over Ismael (Remote object access) in view of MC (Comparing Microsoft Transaction Server to Enterprise JavaBeans) in view of Admitted Prior Art (APA) and further in view of Housel (US. Patent 6,061,714).

47. **As to claim 25**, Ismael, MC, APA do not teach a cache synchronizing. However, Housel teaches (cache synchronization/ establishing a cache (col 2, ln 26-65).

48. It would have been obvious to one of the ordinary skill the art at the time invention was made to combine to apply the teaching Ismael, MC, APA and Housel because Housel's " a cache synchronizing" would allow for a reduced volume of data for transmittal and thereby increase the performance of the communication systems.

49. **As to claim 37,** it is an apparatus claim of claim 25; therefore, it is rejected for the same reasons as claim 25 above.

Response to the argument

50. Applicant's arguments filed 12/11/2003 have been considered but are moot in view of the new ground(s) of rejection.

51. ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (703) 305 5312. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

February 23, 2004

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100